necessary and when an increase in scale cannot be avoided through the use of separate field notes, but the scale must not be increased to such extent as to make the maps too cumbersome for convenient handling and filing.

(d) The maps shall show the allotment number of each tract of allotted land, and shall clearly designate each tract of tribal land affected, together with the sections, townships, and ranges in which the lands crossed by the right-of-way are situated.

§169.7 Field notes.

Field notes of the survey shall appear along the line indicating the right-ofway on the maps, unless the maps would be too crowded thereby to be easily legible, in which event the field notes may be filed separately on tracing linen in such form that they may be folded readily for filing. Where field notes are placed on separate tracing linen, it will be necessary to place on the maps only a sufficient number of station numbers so as to make it convenient to follow the field notes. The field notes shall be typewritten. Whether endorsed on the maps or filed separately, the field notes shall be sufficiently complete so as to permit the line indicating the right-of-way to be readily retraced on the ground from the notes. They shall show whether the line was run on true or magnetic bearings, and, in the latter case, the variation of the needle and date of determination must be stated. One or more bearings (or angular connections with public survey lines) must be given. The 10-mile sections must be indicated and numbered on all lines of road submitted.

§169.8 Public survey.

(a) The terminal of the line of route shall be fixed by reference of course and distance to the nearest existing corner of the public survey. The maps, as well as the engineer's affidavit and the certificate, shall show these connections

(b) When either terminal of the line of route is upon unsurveyed land, it must be connected by traverse with an established corner of the public survey if not more than 6 miles distant from

it, and the single bearing and distance from the terminal point to the corner computed and noted on the maps, in the engineer's affidavit, and in the certificate. The notes and all data for the computation of the traverse must be given.

§169.9 Connection with natural objects.

When the distance to an established corner of the public survey is more than 6 miles, this connection will be made with a natural object or a permanent monument which can be readily found and recognized, and which will fix and perpetuate the position of the terminal point. The maps must show the position of such mark, and course and distance to the terminus. There must be given an accurate description of the mark and full data concerning the traverse, and the engineer's affidavit and the certificate on the maps must state the connections.

§169.10 Township and section lines.

Whenever the line of survey crosses a township or section line of the public survey, the distance to the nearest existing corner shall be noted. The maps shall show these distances and the station numbers at the points of intersections. The field notes shall show these distances and the station numbers.

§169.11 Affidavit and certificate.

(a) There shall be subscribed on the maps of definite location an affidavit executed by the engineer who made the survey and a certificate executed by the applicant, both certifying to the accuracy of the survey and maps and both designating by termini and length in miles and decimals, the line of route for which the right-of-way application is made.

(b) Maps covering roads built by the Bureau of Indian Affairs which are to be transferred to a county or State government shall contain an affidavit as to the accuracy of the survey, executed by the Bureau highway engineer in charge of road construction, and a certificate by the State or county engineer or other authorized State or county officer accepting the right-of-way and stating that he is satisfied as to the accuracy of the survey and maps.